

WHAT IS CLAIMED IS:

1. A self propelled apparatus for operating working attachments, the apparatus comprising:

a ground engaging drive carriage;

a support frame attached to the drive carriage, the support frame including a pair of rearwardly and upwardly extending side members;

a boom having two ends, one end of the boom being pivotally attached to the rearwardly and upwardly extending side members of the support frame and positioned so that it extends forwardly relative to the side members, the other end of the boom configured to receive a working attachment; and

at least one selectively positionable counterweight;

wherein, the counterweight is movable to change the center of gravity of the apparatus to extend the operational parameters of the apparatus.

2. The loader according to claim 1, wherein there are two selectively positional counterweights, one on each side of the machine.

3. The apparatus according to claim 2, wherein the selectively positionable counterweights are moveably attached to the side members of the support frame.

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4. The apparatus according to claim 1, further comprising a power source for providing power to the drive carriage.

5. The apparatus according to claim 1, wherein the drive carriage comprises two sets of track supports, with each set configured to support an endless drive track.

6. The apparatus according to claim 5, further comprising a power source for providing power to the wheeled carriage.

7. The apparatus according to claim 4, further comprising at least one operator support, the operator support configured to be removably attached to the support frame.

8. The apparatus according to claim 7, wherein the operator support is moveable between a first support position and a second storage position.

/ 9. A loader for operating working attachments, the apparatus comprising:

a support frame including a pair of rearwardly and upwardly extending side members;

a ground drive for propelling the loader apparatus;

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a boom having first and second ends, the first end of the boom pivotally attached to the rearwardly and upwardly extending side members of the support frame and positioned so that it extends forwardly relative to the side members, the second end of the boom configured to receive a working attachment, the boom being formed in an arc between the first and second ends;

an actuator, the actuator operatively connected between the boom and the support frame to enable the boom to pivot with respect to the support frame; and,

a power source for providing power to the actuator.

10. The apparatus according to claim 9, further comprising at least one coupling, the coupling configured to operatively connect the power source to a working attachment.

11. The apparatus according to claim 10, wherein the coupling is attached to the second end of the boom.

12. The apparatus according to claim 11, wherein the power source comprises a pump operatively connected to a power supply.

13. The apparatus of claim 9 and at least one electively positionable counterweight pivotably mounted on the support frame about a pivot axis the

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pivot axis being positioned the counterweight with respect to a center of gravity of the apparatus to permit the counterweight to have a major portion thereof selectively positioned on opposite sides of a vertical plane passing through the center of gravity.

14. An apparatus for operating working attachments, the apparatus comprising:

a ground engaging wheeled carriage comprising powered endless tracks on sides of the carriage;

a power source for providing power to the wheeled carriage; and,

a controller, the controller operatively controlling the power source to selectively drive the endless track of the wheeled carriage;

a support frame attached to the wheeled carriage, the support frame including a pair of laterally spaced rearwardly and upwardly extending side members; and,

a boom having two ends, one end of the boom pivotally attached to the rearwardly and upwardly extending side members of the support frame and positioned between the side member and so that it extends forwardly relative to the side members, the other end of the boom configured to receive a working attachment.

15. The apparatus according to claim 14, wherein the controller includes first linkage and second

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linkages, the first and second linkages being connected to control power to the first and second tracks, respectively; whereby the first and second sets of linearly aligned wheels may be independently operated.

16. The apparatus according to claim 15, wherein the power source includes a first drive unit and a second drive unit, with the first and second drive units operatively connected to the first and second tracks, and wherein the first and second linkages are operatively connected to the first and second drive units, respectively.

17. The apparatus according to claim 16, wherein the power source further includes an engine operatively connected to the first and second drive units.

18. The apparatus according to claim 16, wherein the first and second linkages are urged into and maintained in a predetermined position in which the drive units are effectively disengaged from the tracks.

19. The apparatus according to claim 18, wherein the first and second linkages include first and second brackets; and wherein the controller further comprises first and second centering cam members, the first and second centering cam members being

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configured to urge and maintain the first and second brackets in predetermined positions.

20. The apparatus according to claim 19, wherein the first and second centering members include V-shaped cam notches, respectively, which are configured to receive and guide a respective displacement arm of the first and second brackets into the predetermined positions in the absence of an operator's input.

21. The apparatus according to claim 20, further including first and second stops, wherein the first and second stops are configured to engage the first and second centering members, respectively, to permit synchronization of the first and second drive units.

/ 22. A self propelled loader for operating working attachments, the loader comprising:

a ground engaging drive carriage;

a support frame attached to the driver carriage, the support frame including a pair of rearwardly and upwardly extending side members;

a loader boom movably attached to the side members of the support frame and positioned so that the loader boom extends forwardly relative to the side members, a forward end of the loader boom configured to releasably retain and operate a working attachment, the loader having a predetermined center of gravity; and

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at least one selectively positionable counterweight movably mounted on the support frame, the counterweight being movable with respect to a laterally extending vertical plane passing through the center of gravity of the loader to opposite sides of the plane for modifying the effect of the counterweight on the loading capabilities of the forward end of the loader boom.

23. The apparatus according to claim 22, wherein the at least one selectively positionable counterweight may be diametrically positioned relative to the vertical plane.

24. The apparatus according to claim 23, wherein there are two selectively positional counterweights, one on each side of the support frame.

25. The apparatus according to claim 24, wherein the selectively positionable counterweights are pivotably attached to and positioned on an outside surface of the side members of the support frame.

26. The apparatus according to claim 25 wherein the counterweights are pivotably mounted to position a mounting of the counterweight forwardly and rearwardly with respect to the vertical plane.

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27. A method of extending the operational parameters of a walk behind apparatus for operating working attachments comprising:

a walk behind apparatus including:

a ground engaging drive carriage;

a support frame attached to the drive carriage, the support frame including a pair of rearwardly and upwardly extending side members; and,

a boom having two ends, one end of the boom pivotally attached to the rearwardly and upwardly extending side members of the support frame and positioned so that it extends forwardly relative to the side members, the other end of the boom configured to receive a working attachment;

The method comprising:

attaching a movable counterweight to the support frame of the apparatus, and

selectively positioning the counterweight relative to a center of gravity of the apparatus.

28. The apparatus according to claim 27, wherein the attaching a movable counterweight further include attaching a pair of movable counterweights to the frame of the apparatus.

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